Methods of Data Collection

Multiple types of data were collected at various times during the year, both at workshops and onsite. Data was analyzed by the project's evaluators Michael Scarlett and David Davison. A quasi-experimental design was used to compare the participants' learning of science content and their level of comfort with teaching inquiry science with a comparison group of approximately 30 teachers. A summary of the type of data collected for each level of the evaluation is included in Table 1.

Guskey Level	Source 1	Source 2	Source 3	Instruments used
1. Participants' Reactions	Workshop evaluations	Partnership Survey	D2L participation rates/other qualitative D2L data	Workshop Evaluations Relevant Partnership Survey Questions D2L Prompts
2. Participants' Learning	SciPack pre/post tests	Threaded discussions on D2L	Teacher Empowerment Post Scale	Teacher Empowerment Scale
3. Organizational Support and Change	Partnership Survey	Interview with STEM Faculty	Workshop evaluations	Partnership Survey Interview Protocol Workshop evaluations
4. Participants' Use of New Knowledge and Skills	Scoop Lesson Ratings and pre/post lesson reflections	RTOP	Threaded discussions on D2L	Scoop Rating Scales RTOP Rating Scales
5. Student Learning Outcomes	MontCAS data for 4th grade students			MontCAS Science Test

Methods of Data Collection:

1. Workshop surveys: At the end of each workshop, participants completed a survey indicating their level of satisfaction with the workshop and what they learned from it, and were learning from the project.

2. For the first two of the six SciPacks completed, participants took a pre-test and a post-test to assess their learning from that SciPack. (The same pre- and post-tests were administered to a comparison group.)
3. Online discussions focused on questions about science content and its application to participants' classrooms. These discussions were evaluated.
4. All participants (along with many of their administrators) were visited informally in their school settings by an evaluator to assess their satisfaction and comfort with project goals and activities, and whether there were issues that needed to be addressed.
5. Scoop notebooks were completed during the second year of a participant's involvement in the project. Examination of these notebooks by both the participants and the project evaluator indicated how well the participants were implementing new knowledge and skills in their lesson planning.
6. A random sample of participants were observed using RTOP to assess how well they were using inquiry-based strategies in their science instruction.
7. The Survey of Enacted Curriculum and the Teacher Empowerment Survey were administered as pre- and post-tests to evaluate teachers' beliefs about the teaching process.

Lisa, these two links should be at the bottom of this web page:

Teacher Empowerment Scale

Survey of Enacted Curriculum